§439.13

separate disposal or reuse. These residual amounts may be included in the calculation of the average influent BOD₅ loading.

- (3) The practices of recovery, and/or separate disposal or reuse include: physical separation and removal of separable mycelia; recovery of solvents from waste streams; incineration of concentrated solvent wastestreams (including tar still bottoms); and concentration of broth for disposal other than to the treatment system. This part does not prohibit the inclusion of such wastes in raw waste loads in fact, nor does it mandate any specific practice, but rather describes the rationale for determining NPDES permit limitations. The effluent limitation for BOD₅ may be achieved by any of several, or a combination, of these practices.
- (b) The maximum monthly average limitation for TSS, expressed as mass loading (lbs., kg) per day, must be calculated as 1.7 times the BOD_5 limitation determined in paragraph (a) of this section.
- (c) Except as provided in paragraph (d) of this section, the limitations for COD are as follows:

EFFLUENT LIMITATIONS (BPT)

Regulated parameter	Maximum daily ¹	Maximum monthly average ¹
COD	1675	856

1mg/L (ppm).

(d) If the maximum monthly average COD concentration in paragraph (c) of this section is higher than a concentration value reflecting a reduction in the long-term average daily COD load in the raw (untreated) process wastewater of 74 percent multiplied by a variability factor of 2.2, then the monthly average limitation for COD corresponding to the lower concentration value must be applied.

(e) The effluent limitations for cyanide are as follows:

EFFLUENT LIMITATIONS (BPT)

Regulated parameter	Maximum daily ¹	Maximum monthly average ¹
Cyanide (T)	33.5	9.4

1mg/L (ppm).

- (f) When monitoring for cyanide at the end-of-pipe is impractical because of dilution by other process wastewaters, compliance with the cyanide effluent limitations in paragraph (e) of this section must be demonstrated at in-plant monitoring points pursuant to 40 CFR 122.44(i) and 122.45(h). Under the same provisions, the permitting authority may impose monitoring requirements on internal wastestreams for any other parameter(s) regulated by this section.
- (g) Compliance with the limitation in paragraph (e) or (f) of this section may be achieved by certifying to the permit issuing authority that the facility's manufacturing processes neither use nor generate cyanide.

[63 FR 50426, Sept. 21, 1998, as amended at 68 FR 12271, Mar. 13, 2003]

§ 439.13 Effluent limitations attainable by the application of the best conventional pollutant control technology (BCT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the application of BCT: Limitations for BOD₅, TSS and pH are the same as the corresponding limitations in § 439.12.

[63 FR 50426, Sept. 21, 1998]

§ 439.14 Effluent limitations attainable by the application of best available technology economically achievable (BAT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the application of BAT:

EFFLUENT LIMITATIONS (BAT)

Regulated parameter	Maximum daily ¹	Maximum monthly average ¹
Ammonia (as N)	84.1	29.4
Acetone	0.5	0.2
4-methyl-2-pentanone	0.5	0.2
Isobutyraldehyde	1.2	0.5
n-Amyl acetate	1.3	0.5
n-Butyl acetate	1.3	0.5
Ethyl acetate	1.3	0.5
Isopropyl acetate	1.3	0.5
Methyl formate	1.3	0.5
Amyl alcohol	10.0	4.1

Environmental Protection Agency

EFFLUENT LIMITATIONS (BAT)—Continued

Regulated parameter	Maximum daily ¹	Maximum monthly average ¹
Ethanol	10.0	4.1
Isopropanol	3.9	1.6
Methanol	10.0	4.1
Methyl Cellosolve	100.0	40.6
Dimethyl sulfoxide	91.5	37.5
Triethyl amine	250.0	102.0
Phenol	0.05	0.02
Benzene	0.05	0.02
Toluene	0.06	0.02
Xylenes	0.03	0.01
n-Hexane	0.03	0.02
n-Heptane	0.05	0.02
Methylene chloride	0.9	0.3
Chloroform	0.02	0.13
1,2-dichloroethane	0.4	0.1
Chlorobenzene	0.15	0.06
o-Dichlorobenzene	0.15	0.06
Tetrahydrofuran	8.4	2.6
Isopropyl ether	8.4	2.6
Diethyl amine	250.0	102.0
Acetonitrile	25.0	10.2

¹ mg/L (ppm).

- (b) The limitations for COD are the same as specified in §439.12(c) and (d).
- (c) The limitations for cyanide are the same as specified in §439.12(e), (f) and (g).

 $[68\;\mathrm{FR}\;12271,\,\mathrm{Mar}.\;13,\,2003]$

§ 439.15 New source performance standards (NSPS).

(a) Any new source subject to this subpart must achieve the following standards:

PERFORMANCE STANDARDS (NSPS)

Regulated parameter	Maximum daily ¹	Maximum monthly average ¹
BOD ₅	267	111
TSS	472	166
COD	1675	856
Ammonia (as N)	84.1	29.4
Acetone	0.5	0.2
4-methyl-2-pentanone	0.5	0.2
Isobutyraldehyde	1.2	0.5
n-Amyl acetate	1.3	0.5
n-Butyl acetate	1.3	0.5
Ethyl acetate	1.3	0.5
Isopropyl acetate	1.3	0.5
Methyl formate	1.3	0.5
Amyl alcohol	10.0	4.1
Ethanol	10.0	4.1
Isopropanol	3.9	1.6
Methanol	10.0	4.1
Methyl Cellosolve	100.0	40.6
Dimethyl sulfoxide	91.5	37.5
Triethyl amine	250.0	102.0
Phenol	0.05	0.02
Benzene	0.05	0.02
Toluene	0.06	0.02
Xylenes	0.03	0.01
n-Hexane	0.03	0.02

PERFORMANCE STANDARDS (NSPS)—
Continued

Regulated parameter	Maximum daily ¹	Maximum monthly average ¹
n-Heptane	0.05	0.02
Methylene chloride	0.9	0.3
Chloroform	0.02	0.13
1,2-dichloroethane	0.4	0.1
Chlorobenzene	0.15	0.06
o-Dichlorobenzene	0.15	0.06
Tetrahydrofuran	8.4	2.6
Isopropyl ether	8.4	2.6
Diethyl amine	250.0	102.0
Acetonitrile	25.0	10.2

¹ mg/L (ppm)

- (b) The limitations for cyanide are the same as specified in §439.12(e), (f) and (g).
- (c) Any new source subject to the provisions of this section that commenced discharging after November 21, 1988, and prior to November 20, 1998, must continue to achieve the standards specified for this section in the 1988 edition of 40 CFR part 439, until the expiration of the applicable time period specified in 40 CFR 122.29(d)(1), after which the source must achieve the standards specified in §§439.13 and 439.14.

[68 FR 12272, Mar. 13, 2003]

§439.16 Pretreatment standards for existing sources (PSES).

(a) Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart must continue achieving the standards for cyanide specified in paragraph (c) of this section and must achieve the following standards by September 21, 2001:

PRETREATMENT STANDARDS (PSES)

Regulated parameter	Maximum daily ¹	Maximum monthly average ¹
Ammonia (as N) ²	84.1	29.4
Acetone	20.7	8.2
4-methyl-2-pentanone	20.7	8.2
Isobutyraldehyde	20.7	8.2
n-Amyl acetate	20.7	8.2
n-Butyl acetate	20.7	8.2
Ethyl acetate	20.7	8.2
Isopropyl acetate	20.7	8.2
Methyl formate	20.7	8.2
Isopropyl ether	20.7	8.2
Tetrahydrofuran	9.2	3.4
Benzene	3.0	0.7
Toluene	0.3	0.2
Xylenes	3.0	0.7
n-Heptane	3.0	0.7
n-Hexane	3.0	0.7